KADVC12XXXAA

USER MANUAL

Contents

Disclaimer *6*

Precauctions **7**

General precautions *7*

Power Supply *8*

1 Overall Introduction **9**

1.1 System Requirements *9*

1.2 Features *9*

1.3 Accessories *10*

1.4 External View *11*

1.5 Adjusting LCD Display *12*

2 Getting Started **13**

2.1 Inserting SD Card *13*

2.2 Loading the Battery *14*

2.3 Charging the Battery *15*

2.4 The Gestures of Using the Touch Screen . *16*

2.4.1 Single touch 16

2.4.2 Slide 18

2.4.3 Rotate 18

2.5 Buttons & Functions *19*

2.6 About LED Indicators *20*

2.7 Initial Settings Before Use *21*

2.7.1 Setting Date and Time 21

2.7.2 Setting Language 22

3 LCD Display Information.....23

3.1 In DV Mode.....23

3.2 In Voice Recording Mode 25

3.3 In DSC Mode.....26

4 Using the Camera.....28

4.1 Shooting a Movie Clip.....28

4.2 Pause Recording a Movie Clip.....29

4.3 Shooting a photo.....30

4.4 Voice Recording Mode.....30

4.5 Movie Clip / Voice Clip Playback.....31

4.6 Shooting / Playback Photos.....35

4.6.1 Shooting Photos 35

4.6.2 Playback Photos..... 35

5 LCD Display Information.....37

5.1 DV Playback Mode 37

5.2 Voice Recording Playback Mode 38

5.3 DSC Playback Mode.....39

6 Menu Options 40

6.1 Menus of Movie Clip Mode 40

6.1.1 Quality 40

6.1.2 Resolution..... 41

6.1.3 Pre-recording..... 42

6.1.4 Time Lapse..... 42

6.1.5 Dual Streams..... 43

6.1.6 Face Detection 43

6.1.7 Scene Mode 44
6.1.8 White Balance 45
6.1.9 Effect 46
6.1.10 Metering..... 47
6.1.11 EV Compensation..... 48
6.1.12 Backlight..... 48
6.1.13 Contrast..... 49
6.1.14 Sharpness 50
6.1.15 Motion Detection..... 51
6.2 Menu Options of Movie Clip/Voice Playback53
6.2.1 File Protection..... 53
6.2.2 Play Options 54
6.2.3 Delete 55
6.3 Menu Options of Camera Mode 56
6.3.1 Quality 56
6.3.2 Photo Size 57
6.3.3 Capture Mode..... 58
6.3.4 Instant View..... 59
6.3.5 Face Detection 59
6.3.6 Scene Mode 60
6.3.7 White Balance 61
6.3.8 Effect 62
6.3.9 Metering..... 63
6.3.10 AE ISO..... 63
6.3.11 EV Compensation..... 64
6.3.12 Backlight..... 64
6.3.13 Contrast..... 65
6.3.14 Sharpness 66
6.4 Menu Options of Photo Playback 67

6.4.1 File Protection 67
6.4.2 Slide Show Setting 68
6.4.3 Slide Show Effect 68
6.4.4 Delete 69
6.4.5 DPOF 71
6.4.6 Rotate 71
6.5 Setting Menu 72
6.5.1 TV Type 72
6.5.2 File Number (Default: Serial) 74
6.5.3 Date/Time 74
6.5.4 Format 75
6.5.5 Default Setting 75
6.5.6 LCD Brightness 76
6.5.7 Date/Time Stamp 76
6.5.8 Auto Power Off 77
6.5.9 Language 77
6.5.10 Flicker 78
6.5.11 Information 79
6.5.12 Sound 79
6.5.13 LCD Correction 80
6.5.14 Start Logo 80
6.5.15 Digital Zoom 81
7 PC and TV Connection 82
7.1 Connecting to the Computer 82
7.2 Connecting to the Standard TV 82
7.3 Connecting to the HD TV 83
8 Installing the Software 84

9 Appendix.....85

Specifications 85

Troubleshooting 87

Thank you for purchasing this Digital Video Camera. Please read this manual thoroughly and keep it in a safe place for future reference.

Disclaimer

Our company endeavors to ensure the contents of this manual are correct and up-to-date. However, we do not guarantee the accuracy of the contents of this manual. In case there is any discrepancy between this manual and the Digital Video Camera, please use this camera as the basis. We reserve the right to change any content or technical rule without prior notification. In addition, the manufacturer reserves the right to change technical specifications and package contents without prior notification.

Precauctions

General precautions

- Please do not disassemble or use any way to modify the product by yourself, which may corrupt the product or cause electric shock.
- Keep the Digital Video Camera away from the reach of children or animals to prevent them from swallowing the batteries or small accessories.
- Stop using in case there is any kind of liquid or foreign object enters the Digital Video Camera. Turn off the Digital Video Camera and contact your dealer for help if it occurs.
- Do not operate the Digital Video Camera with wet hands; it may cause electric shock.
- Do not place or store the product in an environment of high temperature to avoid damage. The camera is designed for use in the temperature between 0°C and 40°C (32°F and 104°F).
- Do not store the product in the dusty/sandy/dirty place, or the area which is close to air condition/heater. Otherwise it may be ruined.
- Do not open the battery cover while recording the image. By doing so, the current image is unable to store, it may also corrupt other image data already stored in file.
- Please test this Digital Video Camera to ensure it is in normal operations before using it in any important occasion(such as wedding or overseas trip).

Power Supply

- Please ensure using the provided battery or battery charger attached to this Digital Video Camera. Using any other type of battery of battery charger might damage the facility and render the guarantee void.
- Make sure the batteries are in the correct position. Error in the orientation of batteries might damage this product and result in fire.
- Please take out the batteries to avoid leaking of battery fluid if the Digital Video Camera is not in used for a long period of time.
- Please remove the crashed or damaged battery right away to avoid leaking of battery fluid or abnormal expansion.

1 Overall Introduction

Please read this chapter to understand the features and functions of this Digital Video Camera. This chapter also includes the description of system requirement, package contents, and hardware components.

1.1 System Requirements

This Digital Video Camera requires a unit of computer with the following specifications:

- Windows® Vista / XP operating system or Mac OS 10.3 ~10.4
- A CPU of at least the equivalent of Intel® Pentium 4 2.8GHz I
- At least 2GB of RAM
- Standard USB 1.1 connection port or higher
- At least 64MB of display card

Note:
USB 1.1 allows you to transmit files to the host, but using USB 2.0 connection port could increase the transmission speed far faster.

1.2 Features

This Digital Video Camera provides many features and functions including:

- High resolution pixel camera (maximum 16 million pixels)
- Touch screen
- Time lapse
- Pre-recording
- Dual streams
- Capturing a still image in video mode

In addition, this video camera has USB mass storage hard disk, and SD card reader.

1.3 Accessories

This package should contain the following items. In case there is any missing or damaged item, please contact your dealer immediately.

① Digital video camera

② Pouch

③ Lithium battery

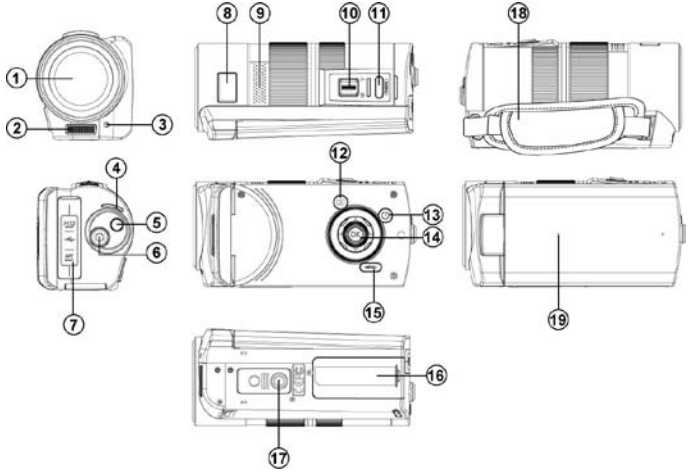
④ Software CD

⑤ HDMI cable

⑥ Video cable

⑦ USB cable

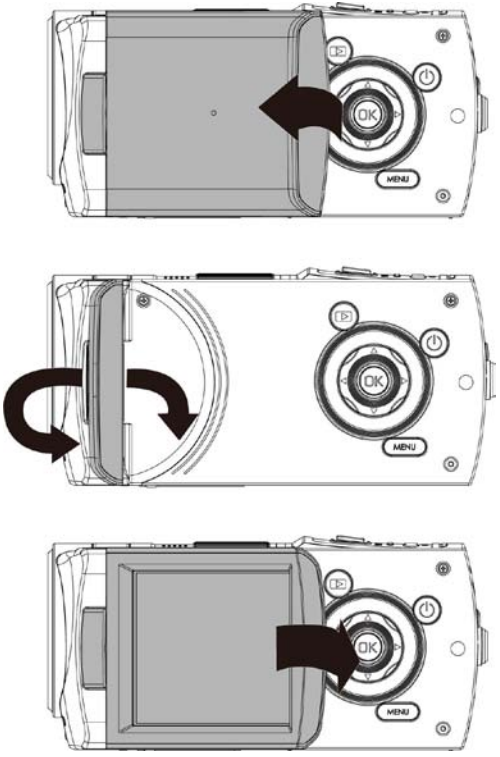
1.4 External View



1	Lens	11	Shutter Button
2	Flash Light	12	Playback Button
3	Self-timer Indicator	13	Power
4	LED Indicator	14	SET Button
5	Mode Button	15	Menu Button
6	Recording Button	16	Battery / Memory Card Compartment
7	USB/HD/TV/Audio Output	17	Tripod socket
8	Status Display	18	Hand Strap
9	Speaker	19	Microphone
10	Zoom Button		

1.5 Adjusting LCD Display

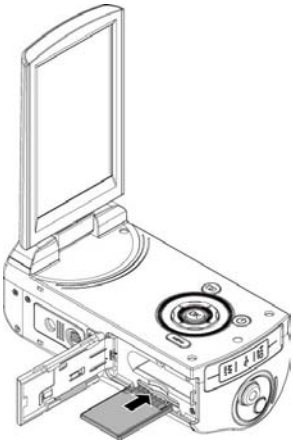
Before taking pictures or recording movie clips, please rotate according to the illustrations below.



2 Getting Started

2.1 Inserting SD Card

1. Insert an SD card and make sure facing the touching face downward.



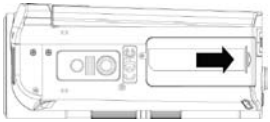
Note:
Do not remove or insert SD cards when the power of the Digital Video Camera is on to avoid damaging files.

2.2 Loading the Battery

Please use only the battery provided or recommended by the manufacturer or dealer.

Note:
Insert battery correctly according to this description. Error in inserting batteries could result in non-repairable damage to this Digital Video Camera.

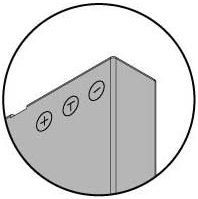
1. Open battery cover.



Battery Status Indicator:

	Battery full
	Battery half full
	Battery empty
	• Charging battery (A new battery should be charged at least 4 hours.) • The device power is supplied by DC input. (No batteries inside.)

2. Insert batteries according to the illustration.



3. Close battery cover.

2.4 The Gestures of Using the Touch Screen

2.4.1 Single touch

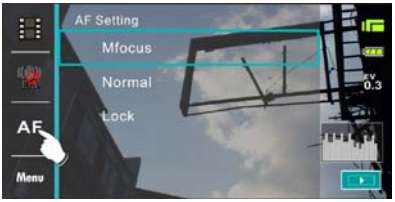
1. Touch hotkey on the screen to switch mode (DV, DSC, and Voice Recording).

2. You can also touch hotkey to change settings as shown below (Take DV function as an example).

- Resolution

- Electronic image stabilizer on/off

- Auto Focus



2.4.2 Slide

Slide right or left to view the previous file or the next file under the [Playback] Mode.

2.4.3 Rotate

Under [Playback] Mode, you can rotate the image by 90°/step as shown below.

2.5 Buttons & Functions

Description	Button	Function
Power Button		To turn ON/OFF the Digital Video Camera.
Menu Button		To display the main OSD menu.
MODE Button		There are three operating modes for the Digital Video Camera: DV Mode, DSC Mode, and Voice Recording Mode. Press the Mode button to switch to different modes.
SET Button		To confirm all settings.
4-Way Direction Button		Press this button Left/Right to adjust the EV compensation; press this button Up in DSC mode to turn on/off the flash light: off, auto, fill-in.
Recording Button		To take movie clips and voice recordings.

Shutter Button		To take images.
Zoom Button		This Digital Video Camera is equipped with 10X Optical Zoom: press the button Right (T) to pull in the distance of the subject, or press the button Left (W) to move away the distance from the object.
Playback Button		To enter Playback mode.

2.6 About LED Indicators

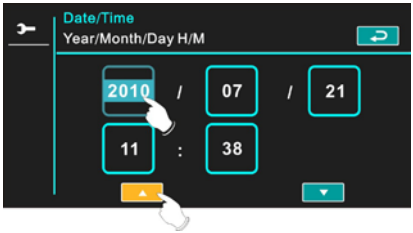
Below table describes the meaning of the camera LED indicators:

	Indicator Color	**Definition**
Power	Green	Turning power on.
	Green blinking	Flash is charging.
Recording	Green blinking	Recording
Self-timer	Red blinking	Start of Self-timer.

2.7 Initial Settings Before Use

2.7.1 Setting Date and Time

1. Turn [On] the Digital Video Camera to set up the date and time for the first time. Set the date and time by moving up/down button or touch the screen to select.
2. Press the [4-Way Direction] Button left/right to select each column. Then press up/down or touch the screen to select the column.
3. Press the [4-Way Direction Button] Up/Down to adjust the value. Press [SET] Button to store the value you change or touch the screen to adjust the Year, Date and Time before pressing the Return Button (OK).



2.7.2 Setting Language

1. It is automatic to move on to Language setting after setting Date/Time.

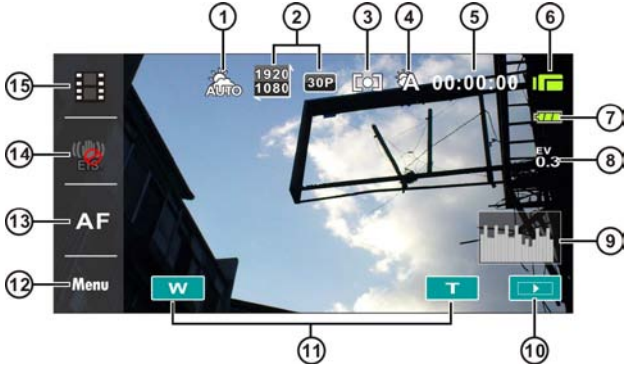
2. Press the [4-Way Direction] Button left/right to select each column. Then press up/down or touch the screen to select the column.

3. Press the [4-Way Direction Button] up/down to adjust the language. Press [SET] Button to store the value you change or touch the screen to adjust the language before pressing the [Return] Button ( ) to leave the setting.

3 LCD Display Information

3.1 In DV Mode

Please refer to the following table.



1	AUTO	Scene mode Indicator
2	1920 1080 30P	Resolution indicator
3	[○]	Metering mode
4	A	White balance indicator
5	00:00:00	Remaining recording time indicator
6		DV mode indicator
7		Battery status indicator
8	EV 0.3	Exposure compensation indicator

9		Histogram indicator
10		Playback button
11		Digital Zoom button
12		Menu button
13		Auto Focus button
14		Electronic image stabilizer (On/Off)
15		Resolution button

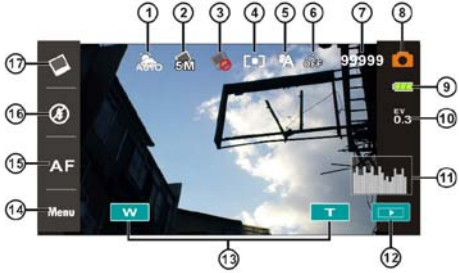
3.2 In Voice Recording Mode

Please refer to the following table.

1	00:00:00	Recording time left indicator
2		Voice Recording Mode indicator
3		Battery status indicator
4		Playback button
5	Menu	Menu button

3.3 In DSC Mode

Please refer to the following table.



1		Scene Mode indicator
2		Resolution indicator
3		Continuous Shot mode
4		Metering mode
5		White balance indicator
6		Self-timer indicator
7		Number of pictures left
8		DSC Mode indicator
9		Battery indicator

10		EV compensation indicator
11		Histogram indicator
12		Playback button
13		Digital zoom button
14		Menu button
15		Auto Focus button
16		Flashlight mode selection (off/auto/fill-in)
17		Resolution button

4 Using the Camera

4.1 Shooting a Movie Clip

1. [DV] mode is the default setting after you power [On] the Digital Video Camera.
2. Press the [Recording] Button to start/stop recording.
3. The Digital Video Camera will store the movie clip automatically.

4.2 Pause Recording a Movie Clip

1. Press [SET] Button during recording a movie clip. The video will pause recording immediately.
2. Press [SET] Button again to start recording a movie clip.
3. The Digital Video Camera will store the video automatically.

Recording is on.

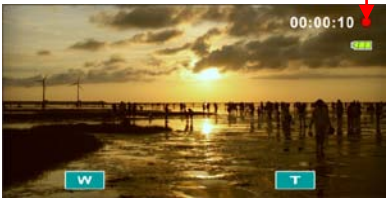
Pause recording.

Press [SET] Button to pause.

.

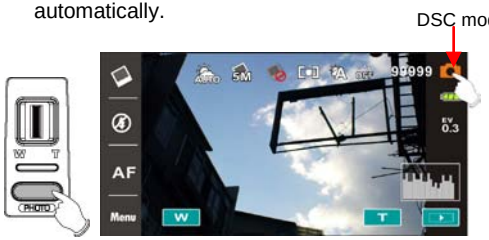
Start recording.

Press [SET] Button again.



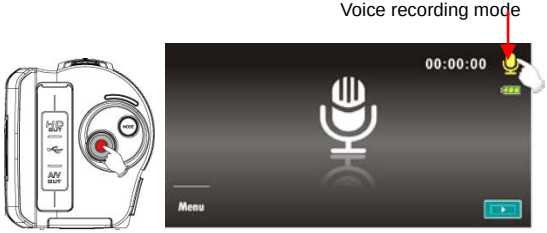
4.3 Shooting a photo

1. Turn [On] the Digital Video Camera, press [Mode] Button or touch hotkey on the screen to switch to [DSC] mode.
2. Press [Shutter] Button to take pictures.
3. The Digital Video Camera will store the image automatically.



4.4 Voice Recording Mode

1. Turn [On] the Digital Video Camera, press [Mode] Button or touch hotkey on the screen to switch to [Voice Recording] mode.
2. Press [Recording] Button to start/stop voice recording.

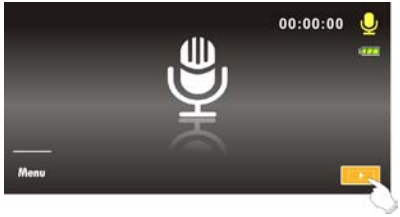


4.5 Movie Clip / Voice Clip Playback

1. In [Movie]/ [Voice] Recording Mode, press [Playback] Button to display recently stored files on the LCD screen.

Playback

Movie Clip Playback Mode Indicator



Voice Recording Playback Mode

2. Press [4-Way Direction] Button up/down, left/right to view stored files. Press [SET] Button to playback or touch the screen to select Playback of the file.

3. To pause the Playback of file, press the [Recording] Button or touch the screen icon (/).

4. Press [Playback] Button again to return to Movie/Voice Recording Mode.

Press [Playback] Button again to return to Movie/Voice Recording Mode.

5. You can also playback the movie clip in different speeds by touching (ON/OFF) the screen icon ( ).

Playback speed is as below when the Slow Motion is **"LIGADO":**		
◀◀		▶▶
Rewind	**2X** play	Forward
Rewind	**4X** play	Forward
Rewind	**8X** play	Forward
Rewind	**16X** play	Forward

6. Capture the image from movie clip playback.

Press [Shutter] Button in replaying the movie clip.

The Digital Video Camera will store images automatically.

Image Resolution	
1920 1080 30P	1920 x 1080
1280 720 60P or 1280 720 30P	1280 x 720
848 480 60P	848 x 480
432 240 240P	432X240

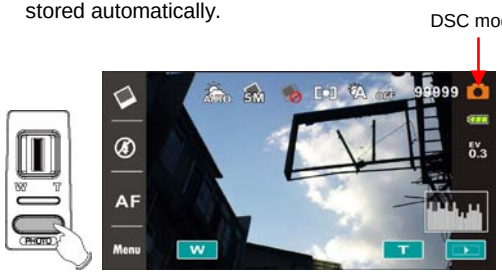
Note:
The image size depends on Image Resolution.

4.6 Shooting / Playback Photos

4.6.1 Shooting Photos

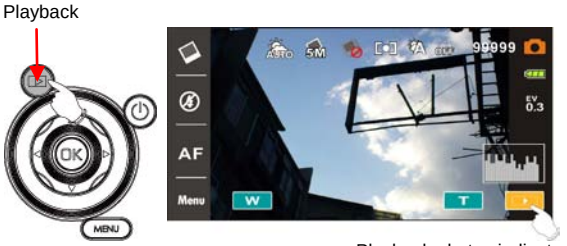
1. Turn [On] the power and adjust the [Mode] Button to [DSC] Mode or touch hotkey on the screen to set up.

2. Press [Shutter] Button to capture images which will be stored automatically.

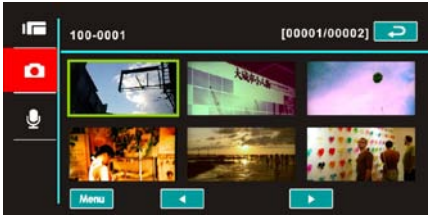


4.6.2 Playback Photos

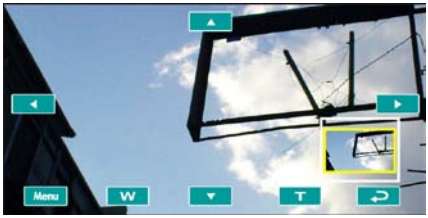
1. In [DSC] Mode, press [Playback] Button to display the images on the LCD screen.



2. Press [4-Way Direction] Button up/down or left/right to view the stored files. Press [SET] Button or touch the screen to playback the image.



3. Touch the screen (T or W) to enlarge/shrink the image, then you can move the image up/down or left/right.

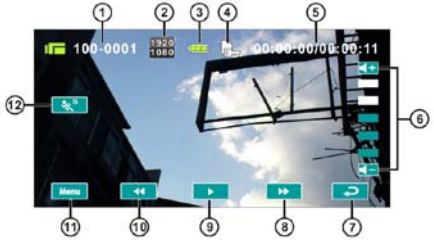


4. Press [Playback] Button again to return to [DSC] Mode.

5 LCD Display Information

5.1 DV Playback Mode

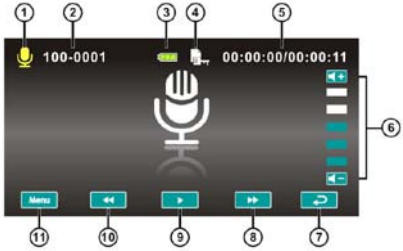
Please refer to the following table.



1	**000-0000**	Folder and file number
2	1920 1080	Resolution indicator
3		Battery status indicator
4		File Protection indicator
5	**00:00:00**	Length of each Movie Clip
6		Sound volume touch icons
7		Return button
8		Fast forward playback button
9	/	Playback/Pause button
10		Fast rewind playback button
11	Menu	Menu button
12		Slow motion playback button

5.2 Voice Recording Playback Mode

Please refer to the following table.



1		Voice Recording Mode indicator
2	**000-0000**	Folder and file number
3		Battery status indicator
4		File Protection indicator
5	**00:00:00**	Length of each movie clip
6		Sound volume touch icons
7		Return button
8		Fast forward playback button
9		Playback/Pause button
10		Fast rewind playback button
11		Menu button

5.3 DSC Playback Mode

Please refer to the following table.

1		DSC Mode indicator
2	**000-0000**	Number of pictures left
3	5M	Resolution indicator
4		Battery status indicator
5		File Protection indicator
6		DPOF(Digital Print Order Format) indicator
7		Previous file
8		Return button
9	T	Zoom-In indicator
10	W	Zoom-Out indicator
11	Menu	Menu button
12		Next file

6 Menu Options

Please read this chapter to understand the settings and advanced operations of this Digital Video Camera.

6.1 Menus of Movie Clip Mode

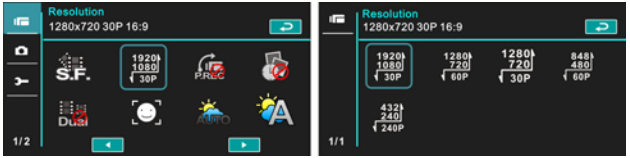
Press [MENU] button to display menu options of movie clip under the [DV] mode.

6.1.1 Quality

1. Turn [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Quality] item. Press [SET] Button to display submenu; or touch the screen to select the item.
3. Press [4-way Direction] Button to select [Super Fine], [Fine], or [Normal]. Press [SET] Button or touch the screen to confirm the setting.

6.1.2 Resolution

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Resolution] item. Press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select and press [SET] Button to confirm; or touch the screen to select the item.

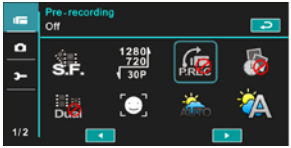


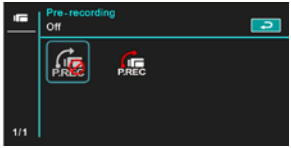
1920 1080 30P	1920 x 1080 30p
1280 720 60P	1280 x 720 60p
1280 720 30P	1280 x 720 30p
848 480 60P	848 x 480 60p
432 240 240P	432 x 240 240p

Note:
The resolution will be different due to various TV Type settings. Please refer to chapter 6.5.1 "TV Type".

6.1.3 Pre-recording

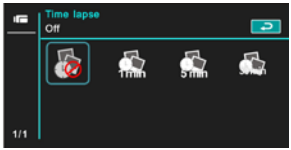
1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Pre-recording] item. Press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to choose [Off]/[On], and press [SET] Button or click the screen to confirm the setting.





6.1.4 Time Lapse

1. Power [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to choose the [Time Lapse] item. Press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select [Off], [1 minute], [5 minutes], or [30 minutes]. Press [SET] Button or touch the screen to confirm.

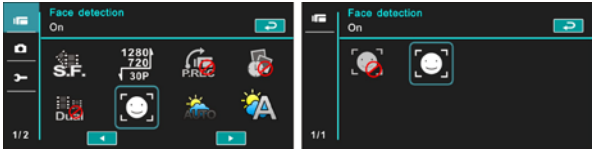


6.1.5 Dual Streams

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Dual streams] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off]/ [On]. Press [SET] Button or touch the screen to confirm the setting.

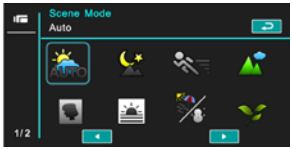
6.1.6 Face Detection

1. Power [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Face Detection] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off]/ [On]. Press [SET] Button or click the screen to confirm.



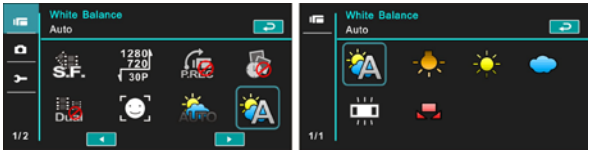
6.1.7 Scene Mode

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Scene Mode] item. Press [SET] Button to display submenu; or touch the screen to choose the item.
3. Press [4-way Direction] Button to select [Auto], [Night], [Sports], [Landscape], [Portrait], [Sunset], [Sand/Snow], [Flower], [Firework], or [Aquarium]. Press [SET] Button or touch the screen to confirm.



6.1.8 White Balance

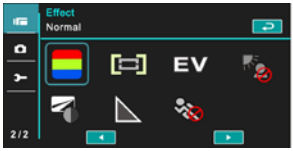
1. Power [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [White Balance] item. Press [SET] Button to display submenu; or touch the panel to select the item.
3. Press [4-way Direction] Button to select [Auto], [Incandescent], [Daylight], [Cloudy], [Fluorescent], or [Preset]. Press [SET] Button or touch the panel to confirm.



Auto	Automatic white balance adjustment.
Incandescent	The setting is suitable for Incandescent lamp lighting, or environments with dark light.
Daylight	For daylight recording.
Cloudy	For cloudy or shady environments.
Fluorescent	For fluorescent lamp lighting, or environments with bright light.
Preset	Preset on a plain white background for more realistic white balance value.

6.1.9 Effect

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Effect] item. Press [SET] Button to display submenu; or touch the screen to select the item.
3. Press [4-way Direction] Button to select [Normal], [Art], [Sepia], [Negative], [B/W (Black/White)], or [Vivid]. Press [SET] Button to confirm; or touch the screen to select the item.



Normal	Recordings with natural color.
Art	Recordings with oil painting color.
Sepia	Recordings with sepia-toned color.
Negative	Recordings with negative color.
B/W	Recordings with black/white color.
Vivid	Recordings with bright color.

6.1.10 Metering

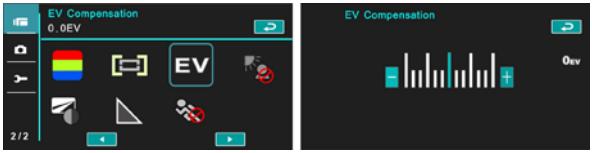
1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Metering] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Center], [Average], or [Spot]. Press [SET] Button or touch the screen to confirm.

Center	To preserve background details while letting lighting conditions at the center of the frame define exposure.
Averaged	For exposure to be evenly distributed around the selected frame.
Spot	To ensure correct exposure for the object even if the background is very bright or very dark.

6.1.11 EV Compensation

Use this function to adjust the value of EV compensation, which is ranged form -2.0EV to +2.0EV (at 0.3EV increment). The higher the EV value, the brighter the image will be.

1. Power [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and then press [4-way Direction] Button to select the [EV Compensation] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to increase/decrease the value. Press [SET] Button or touch the screen to confirm.

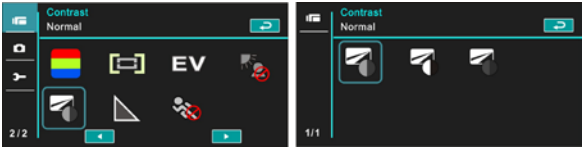


6.1.12 Backlight

1. Turn [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Backlight] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off]/ [On]. Press [SET] Button or touch the screen to confirm.

6.1.13 Contrast

1. Turn [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Contrast] item. Press [SET] Button or touch the screen to display submenu.
3. Press the [4-way Direction] Button to select [Normal], [High], or [Low]. Press [MENU] Button or touch the screen to confirm.



Normal	For normal scenes.
High	For brighter scenes.
Low	For darker scenes.

6.1.14 Sharpness

1. Power [On] the Digital Video Camera and ensure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Sharpness] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Normal], [High], or [Low]. Press [SET] Button or touch the screen to confirm.

Normal	For normal scenes.
High	For sharper scenes.
Low	For softer scenes.

6.1.15 Motion Detection

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Motion Detection] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [On] or [Off]. Press [SET] Button or touch the screen to confirm.

The following image will be shown when the motion detection function is on:

If the green pillar rises to peak, the Digital Video Camera will take movie clips automatically without pressing the recording button.

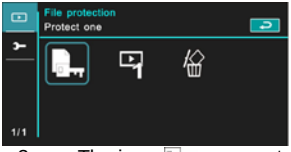
If the green pillar disappears, the Digital Video Camera will end taking movie clips automatically without pressing the recording button.

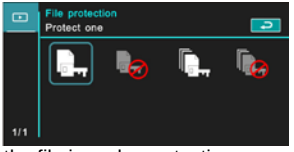
6.2 Menu Options of Movie Clip/Voice Playback

When in [Movie Clip]/ [Voice] playback mode, press the [MENU] Button to show the movie clip options menu.

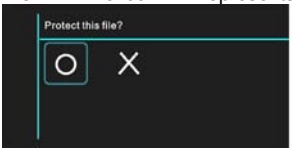
6.2.1 File Protection

1. Power [On] the Digital Video Camera and make sure it is in the [Movie Clip]/ [Voice] Playback mode.
2. Press [MENU] Button. Then, press [4-way Direction] Button or touch the screen to select the [File Protection] item. Press [SET] Button or touch the screen to display submenu.





3. The icon represents the file is under protection.



Protect One	Protect one file.
Unprotect One	Unprotect one file.
Protect All	Protect all files.
Unprotect All	Unprotect all files.

Note : To unlock the file from Protect, repeat steps stated above. After the file is unlocked from Protect mode, the locked icon will disappear.

6.2.2 Play Options

1. Power [On] the Digital Video Camera and make sure it is in the [Movie Clip]/ [Voice] playback mode.
2. Press [MENU] Button. Then, press [4-way Direction] Button or touch the screen to select the [Play Options] item. Press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select [Play One], [Play All], [Repeat One], or [Repeat All], then press [SET] Button or touch the screen to confirm. The movie clip will playback automatically.

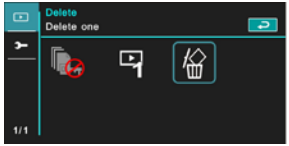
Play One	To playback one file.
Play All	To playback all files.
Repeat One	To replay single file.
Repeat All	To replay all files.

6.2.3 Delete

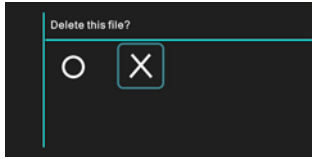
1. Power [On] the Digital Video Camera and make sure it is in the [Movie Clip]/ [Voice] playback mode.

2. Choose the to-be-deleted file and press [MENU] Button/ press [4-way Direction] Button down to select the [Delete] item; or touch the screen to select the item.

3. Use [4-way Direction] Button to select [Delete One], [Delete All], or [Delete Selections]; then press [SET] Button or touch the screen to confirm.



4. Press [4-way Direction] Button or touch the screen to select [O]/ [X] and press [SET] Button to delete file(s).



5. You can choose the [Delete Selections] item to delete certain file.

Delete One	Delete one file.
Delete All	Delete all files.
Delete Selections	Select the file and delete.

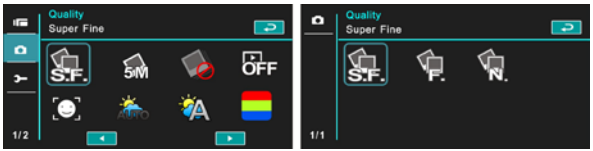
Note:
The files cannot be recovered once deleted. Therefore, please make sure you have a backup file before delete. The protect files will not be able to delete. You must unlock the file before deleting it.

6.3 Menu Options of Camera Mode

During [DSC] Mode, press [MENU] Button to display camera mode option menu.

6.3.1 Quality

1. Turn [On] the Digital Video Camera and ensure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Quality] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Super Fine], [Fine], or [Normal]. Press [SET] Button or touch the screen to confirm the setting.



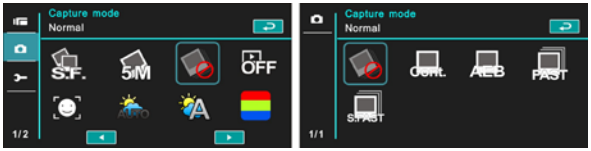
6.3.2 Photo Size

1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Photo Size] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [16M], [10M], [5M], or [3M]. Press [SET] Button or touch the screen to confirm.

16M 16M	4608 x 3456 pixels (Interpolation)
10M 10M	3648 x 2736 pixels
5M 5M	2592 x 1944 pixels
3M 3M	2048 x 1536 pixels

6.3.3 Capture Mode

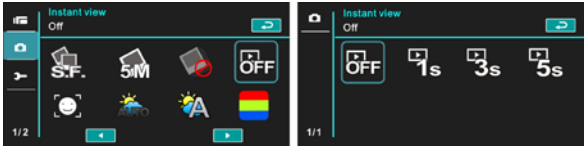
1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and then press [4-way Direction] Button to select the [Capture Mode] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Precise Quality], [Precise Quality Cont.], [AEB mode], [Fast Cont.], or [Super Fast Cont.]. Press [SET] Button or touch the screen to confirm.



Precise Quality	Shoot single photo.
Cont. Precise Quality Cont.	Shoot photos continually.
AEB AEB mode	Shoot three photos continually.(For brighter, normal, darker photo each)
FAST Fast Cont.	Shoot 10 photos continually.
S.FAST Super Fast Cont.	Shoot 30 photos continually.

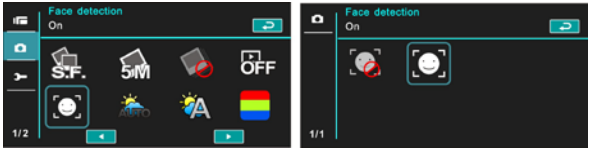
6.3.4 Instant View

1. Turn [On] the Digital Video Camera and ensure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Instant View] item. Press [SET] Button to display submenu or touch the screen to select the item.
3. Press [4-way Direction] Button to select [Off], [1 second], [3 seconds], or [5 seconds]. Press [SET] Button or touch the screen to confirm.



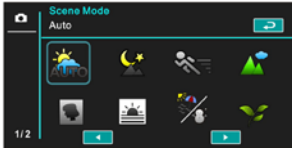
6.3.5 Face Detection

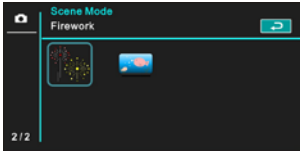
1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Face Detection] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off], or [On]. Press [SET] Button or touch the screen to confirm.



6.3.6 Scene Mode

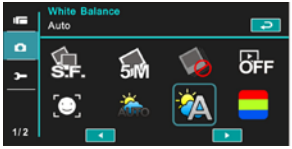
1. Turn [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Scene Mode] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Auto], [Night], [Sports], [Landscape], [Portrait], [Sunset], [Sand/Snow], [Flower], [Firework], or [Aquarium]. Press [SET] Button/ touch the screen to confirm.





6.3.7 White Balance

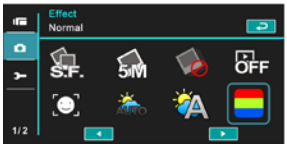
1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [White Balance] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Auto], [Incandescent], [Daylight], [Cloudy], [Fluorescent], or [Preset]. Press [SET] Button or touch the screen to confirm.



Auto	Automatic white balance adjustment.
Incandescent	The setting is suitable for Incandescent lamp lighting, or environments with dark light.
Daylight	For daylight recording.
Cloudy	For cloudy or shady environments.
Fluorescent	For fluorescent lamp lighting, or environments with bright light.
Preset	Preset on a plain white background for more realistic white balance value.

6.3.8 Effect

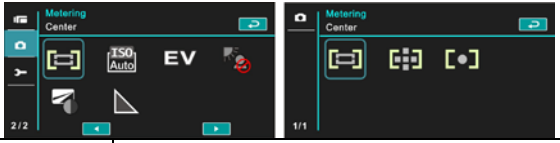
1. Turn [On] the Digital Video Camera and ensure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Effect] item. Press [SET] Button or click the screen to display submenu.
3. Press [4-way Direction] Button to select [Normal], [Art], [Sepia], [Negative], [B/W (Black/White)], or [Vivid]. Press [SET] Button to confirm; or touch the screen to select the item.



Normal	Images with nature color.
Art	Images with oil painting color.
Sepia	Images with sepia-toned color.
Negative	Images with negative color.
B/W	Images with black/white color.
Vivid	Images with bright color.

6.3.9 Metering

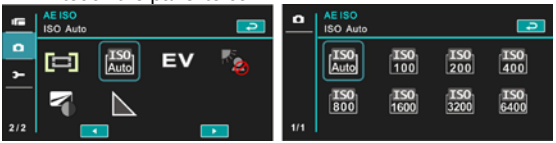
1. Turn [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Metering] item. Press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select [Center], [Average], or [Spot]. Press [SET] Button or touch the screen to confirm the setting.



Center	To preserve background details while letting lighting conditions at the center of the frame define exposure.
Average	For exposure to be evenly distributed around the selected frame.
Spot	To ensure correct exposure for the object even if the background is very bright or very dark.

6.3.10 AE ISO

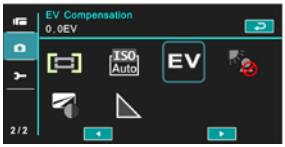
1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [AE ISO] item. Press [SET] Button or touch the panel to display submenu.
3. Press [4-way Direction] Button to select [Auto], [100], [200], [400], [800], [1600], [3200], or [6400]. Press [SET] Button or touch the panel to confirm.



6.3.11 EV Compensation

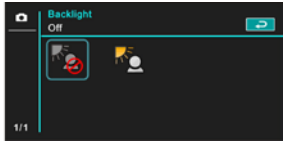
Use this function to adjust the value of EV compensation, which is ranged form -2.0EV to +2.0EV (at 0.3EV increment). The higher the EV value, the brighter the image will be.

1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [EV Compensation] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to increase/decrease the value. Press [SET] Button or touch the screen to confirm.



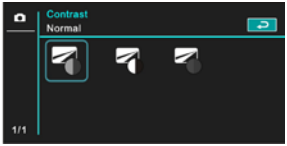
6.3.12 Backlight

1. Power [On] the Digital Video Camera and ensure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Backlight] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off] or [On]. Press [SET] Button or touch the screen to confirm.



6.3.13 Contrast

1. Turn [On] the Digital Video Camera and ensure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Contrast] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Normal], [High], or [Low]. Press [SET] Button or touch the screen to confirm.



Normal	Images with normal scenes.
High	Images with brighter scenes.
Low	Images with darker scenes.

6.3.14 Sharpness

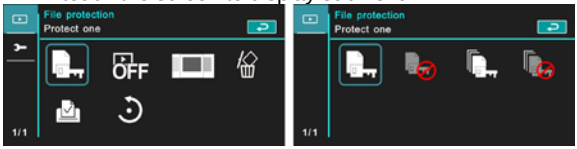
1. Power [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Sharpness] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Normal], [High], or [Low]. Press [SET] Button or touch the screen to confirm.

Normal	Images with normal scenes.
High	Images with brighter scenes.
Low	Images with darker scenes.

6.4 Menu Options of Photo Playback

6.4.1 File Protection

1. Turn [On] the Digital Video Camera and ensure it is in the [Playback] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [File Protection] item; press [SET] Button or touch the screen to display submenu.



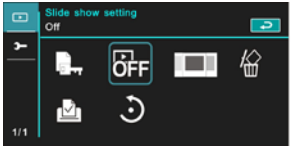
3. The locked icon will be shown to indicate the file is under protection.

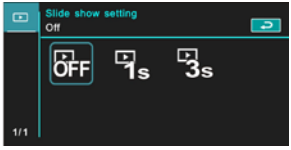
Protect One	Protect one file.
Unprotect One	Unprotect one file.
Protect All	Protect all files.
Unprotect All	Unprotect all files.

Note:
Repeat above-mentioned steps to unlock the file. When the file is unlocked, the locked icon will disappear.

6.4.2 Slide Show Setting

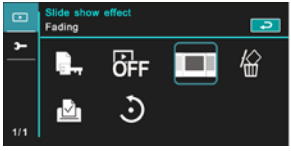
1. Turn [On] the Digital Video Camera and make sure it is in the [DSC] mode.
2. Press [4-way Direction] Button to select the [Slide Show Setting] item to enter into submenu; or touch the screen to select the item.
3. Use [4-way Direction] Button or touch the screen to choose [Off], [1 Second], or [3 Seconds]. The images will playback automatically.

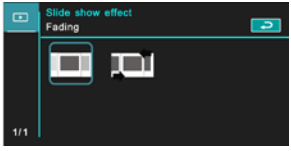




6.4.3 Slide Show Effect

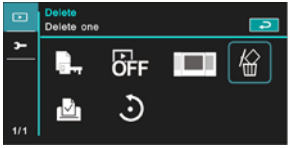
1. Turn [On] the Digital Video Camera and make sure it is in the [Playback] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Slide Show Effect] item; press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select [Fading] or [Flying], press [SET] Button or touch the screen to display submenu.



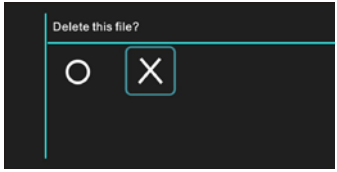


6.4.4 Delete

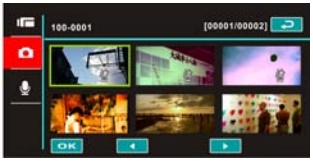
1. Turn [On] the Digital Video Camera and make sure it is in the [Playback] mode.
2. Choose the to-be-deleted file and press the [MENU] Button/ [4-way Direction] Button down to select the [Delete] item; press [SET] Button to display submenu.
3. Use [4-way Direction] Button to select [Delete One], [Delete All], or [Delete Selections]. Press [SET] Button or touch the screen to confirm.



4. Press [4-way Direction] Button/touch the screen to choose [O] or [X] and press [SET] Button to delete file(s).



You can choose [Delete Selections] to delete certain file.



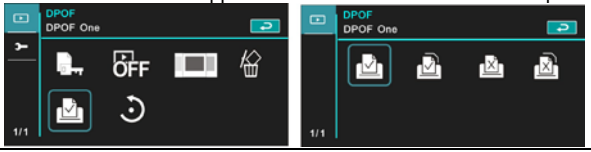
Delete One	Delete one file.
Delete All	Delete all files.
Delete Selections	Choose the file and delete.

Note:
The files cannot be recovered once deleted. Therefore, please make sure you have a backup file before delete. The protect files will not be able to delete. You must unlock the file before deleting the protected file.

6.4.5 DPOF

Use DPOF(Digital Print Order Format) to mark the printing information stored in the memory card.

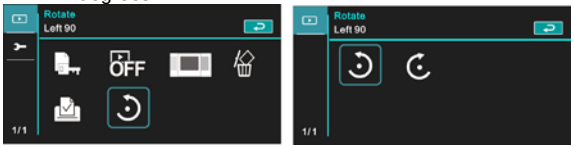
1. Turn [On] the Digital Video Camera and make sure it is in the [Playback] mode. Press [Playback] Button and then press [MENU] Button to show menu options of image playback; or touch the panel to select the item.
2. Press [4-way Direction] Button to select the [DPOF] item, and press [SET] Button or touch the screen to confirm.
3. Use [4-way Direction] Button and press [SET] Button to confirm; or touch the screen to choose the item. The DPOF icon will appear to indicate the file is in order for printing.



Notes:
1. A memory card is necessary for using DPOF function.
2. All videos/pictures are in order for printing after setting DPOF.

6.4.6 Rotate

1. Turn [On] the Digital Video Camera and make sure it is in the [Playback] mode.
2. Press [4-way Direction] Button to select the [Rotate] item to enter into submenu; or touch the screen to choose the item.
3. Use [4-Way Direction] Button to select [Left 90] or [Right 90] and press [SET] Button to confirm; or touch the screen to select the item. The image will rotate left/right by 90 degrees.



6.5 Setting Menu

Setting Menu can be applied on all kinds of the Digital Video Camera settings.

6.5.1 TV Type

1. Power [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [TV Type] item. Press [SET] Button or touch the panel to display submenu.
3. Use [4-way Direction] Button to choose [NTSC] or [PAL], then press [SET] Button or touch the screen to confirm.

NTSC

PAL

Note:
The video resolution will be different due to various TV Type settings.

Setting reference of TV type	
NTSC NTSC	America, Canada, Japan, Korea, Mexico, Taiwan
PAL PAL	Australia, Austria, Belgium, China, Denmark, Finland, Germany, UK, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway

6.5.2 File Number (Default: Serial)

The file number can be set in this function.

1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [File Number] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to choose [Reset]/ [Serial], then press [SET] Button or touch the panel to confirm.

Notes:
1. The file number will start from 0001 when setting to [Reset].
2. When setting to [Serial], the stored files will be in serial numbers.

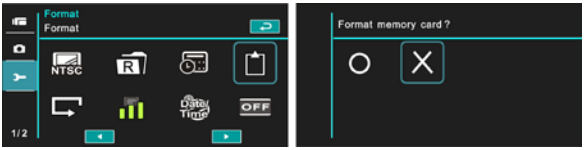
6.5.3 Date/Time

Please refer to the chapter 2.7.1 “Setting Date/Time.”

6.5.4 Format

Use this function to format the memory card/ built-in memory.

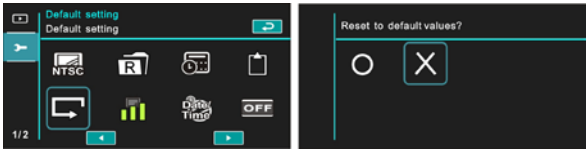
1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Use [4-way Direction] Button to select the [Format] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [O] or [X] to confirm; or touch the screen to click the item.



6.5.5 Default Setting

Use this function to reset from all settings to default settings.

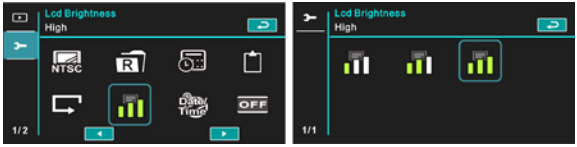
1. Power [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Default Setting] item, then press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button/ touch the screen to choose [O] or [X], press [SET] Button or touch the screen to confirm.



6.5.6 LCD Brightness

This function is to adjust the brightness of LCD.

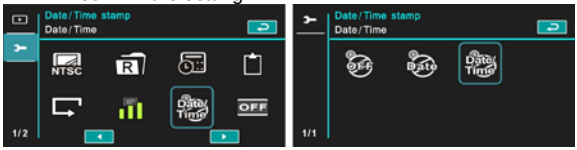
1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Use [4-way Direction] Button to select the [LCD Brightness] item, then press [SET] Button or click the screen to confirm.
3. Use [4-way Direction] Button to select [Low], [Medium], or [High], then press [SET] Button or touch the screen to confirm the setting.



6.5.7 Date/Time Stamp

This function is to stamp date/time on photos.

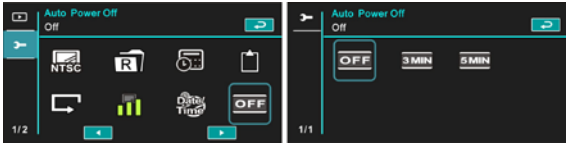
1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Date/Time Stamp] item, press [SET] Button to display submenu; or touch the screen to select the item.
3. Use [4-way Direction] Button to choose [Off], [Date], or [Date/Time], press [SET] Button or touch the screen to confirm the setting.



6.5.8 Auto Power Off

This function is to power off the Digital Video Camera to save energy after it is not in use for several minutes.

1. Power [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Auto Power Off] item, then press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to choose [Off], [3 min], or [5 min]. Press [SET] Button or touch the screen to confirm the setting.



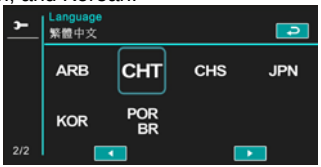
6.5.9 Language

Please refer to chapter 2.7.2 “Setting Time/Date and Language.”

1. Turn [On] the Digital Video Camera and switch to [Setting] mode. Move [4-way Direction] Button left/right to select the [Language] item, and press [SET] Button or click the screen to confirm.

2. Press [4-way Direction] Button/touch the screen to select the following languages: English, Deutsch, French,

Spanish, Italian, Japanese, Portuguese, Traditional Chinese, Simplified Chinese, Turkish, Russian, Thai, Arabian, and Korean.



6.5.10 Flicker

Use this setting to adjust the frequency system which corresponds to your local area.。

1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Flicker] item, press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button/touch the screen to select [Auto], [60Hz], or [50Hz]. Press [SET] Button or touch the screen to confirm.

Reference of frequency setting	
50HZ 50HZ	UK, Germany, Spain, Italy, France, Netherlands, Portugal, Russia, China, Japan
60HZ 60HZ	USA, Taiwan, Korea, Japan

6.5.11 Information

This function is to show information on the LCD screen to help you taking better photos/movie clips.

1. Power [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Information] item, and press [SET] Button or touch the screen to display submenu.
3. Use [4-way Direction] Button to select [Normal], [Histogram], or [Off]. Press [SET] Button or touch the screen to confirm.

6.5.12 Sound

Use this function to adjust the sound volume.

1. Turn [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button to select the [Sound] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [High], [Meidan], [Low], or [Off], then press [SET] Button or touch the screen to confirm.

6.5.13 LCD Correction

This function is to correct the accuracy of LCD touch screen.

6.5.14 Start Logo

Use this function to set up the image shown on the screen when the Digital Video Camera is turned on.

1. Power [On] the Digital Video Camera and switch to [Setting] mode.
2. Press [4-way Direction] Button and choose the [Start Logo] item, press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Default Setting] or [User Setting]. Press [SET] Button/touch the panel to choose the item.

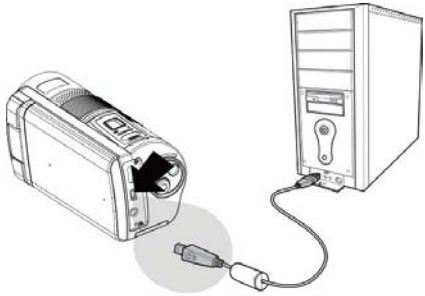
6.5.15 Digital Zoom

1. Power [On] the Digital Video Camera and make sure it is in the [DV] mode.
2. Press [MENU] Button and press [4-way Direction] Button to select the [Digital Zoom] item. Press [SET] Button or touch the screen to display submenu.
3. Press [4-way Direction] Button to select [Off], [X10], or [Maximum]. Press [SET] Button or touch the screen to confirm.

7 PC and TV Connection

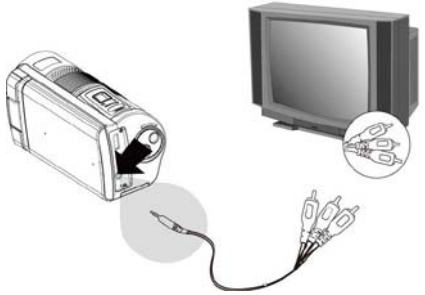
7.1 Connecting to the Computer

As shown below, use the provided USB cable and connect the Digital Video Camera to a PC for file transmission.



7.2 Connecting to the Standard TV

As shown below, use the provided video cable and connect the Digital Video Camera to the standard TV.



7.3 Connecting to the HD TV

As shown below, use the provided HDMI cable to connect the Digital Video Camera to a HD TV for high resolution picture display.

8 Installing the Software

1. Place the attached CD ROM into the CD player.
2. If the CD does not execute automatically, please use Windows File Manager to execute the **Install_CD.exe** file in the CD.

   The following screen will be shown up.

3. Press the [Menu] item to start the installation process according to the instructions on-screen.

Troubleshooting

Problem	Possible Cause	Solution
Can not turn on the power of Digital Video Camera.	1. Batteries are not inserted correctly. 2. Batteries are dead.	1. Please insert batteries correctly. 2. Replace the batteries.
Camera shutdown suddenly.	1. Power saving mode already activated. 2. Batteries are dead.	1. Please turn on the power again. 2. Replace the batteries.
Pictures are not stored in the memory.	Power off before storing the images.	Please change to new batteries when the battery indicator turns to red color.
Camera shutdown when using Self-timer shooting picture.	Batteries in camera are dead.	Change new batteries.

Images are out of focus	Object exceeds the range of focus.	Refocus by zooming in/out.
Unable to use the external memory card.	1. Memory card is Protected. 2. Memory card contains non-DCF images taken by other cameras.	1. Unlock the memory card. 2. Reformat the memory card. Please make sure to backup the file before reformatting memory card.。
All Buttons can not work or camera hangs.	Short circuit occurred when connecting the camera to other device.	Take out batteries in the camera and re-insert again.